

# STATE OF MAINE

## **Board of Licensure for Professional Engineers**

### Fall Newsletter 2005

#### **The Board of *Registration* Becomes the Board of *Licensure***

Recent legislation effects a change in our name from the “State Board of Registration for Professional Engineers” to the “State Board of Licensure for Professional Engineers. This change reflects a national trend and Maine’s decision to correspond with it and to more accurately reflect the Board’s regulatory role.

Generally speaking, a license is permission from authorities for an individual to engage in a specific activity. The right to give a license also implies the right to deny a license. On the other hand, **registration** generally suggests a lower level of regulatory oversight, and commonly is understood to mean that anyone who registers has the right to perform the activity. **Licensure** more accurately describes the role of engineering boards. Consequently, boards across the country are moving to adopt this change in terminology. This terminology is consistent with other Maine boards and license programs.

It is important to note, however, that all wall certificates and stamps containing the term “registration” remain valid.

Every reference to “registration” or similar phrase in the statute has been changed to “license” and its equivalents. In the upcoming months, the rules will be revised to reflect this.

#### **Members of the Board**

Ralph F. Sweet, P.E., Chair  
John E. Dority, P.E., Vice Chair  
Dr. Donald A. Grant, P.E.  
Stephen W. Cole, P.E.  
Kathy Gustin Williams, P.E.  
William A. Lotz, P.E.  
Paula M. Hamilton, Public Member

#### **Staff**

Warren T. Foster, P.E., Exec. Director  
Beatrice M. Labbe, Admin. Office Mgr.  
Marilyn Condon, Board Clerk

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NEW WEB SITE: [www.maine.gov/professionalengineers/](http://www.maine.gov/professionalengineers/)

## **From The Chair – Ralph F. Sweet, P.E.**

### **CONSTRUCTION SIGN OFF**



The trend in the building industry in several states is that code enforcement officers require a project's construction be signed off by a licensed engineer who states in writing that the project is substantially constructed in accordance with the drawings and specifications. These drawings and specifications would be the ones submitted to municipal officials to obtain the building permits for the project. The sign off would be required at the completion of construction and prior to issuing an occupancy permit for the building. The Board has voted to support legislation in Maine that would be similar to other states that have this requirement. The Board will review the requirements of other states to determine what might work best for Maine. The Board would appreciate comments from our licensees to help craft meaningful legislation.

### **LIGHTING ENGINEERING**

The Board recently investigated a complaint of unlicensed engineering practice against three employees of a utility company that appeared to be doing lighting engineering for private companies. The Board decided that the three employees were not doing lighting engineering, although it was broadly implied in the utility's brochure, and the case against them was dismissed.

During the Board's investigation, it came to our attention that utilities may be offering to do lighting engineering for private companies in a similar manner as in the complaint described above. It was also determined that lighting equipment manufacturers and their representatives may be providing lighting engineering services but with fine print notes attached to every document that states the company is not responsible for the accuracy of the information nor anything that appears to be lighting engineering.

What does a lighting engineer do that is different from a lighting designer? This question came up at the Board meeting and the Board voted to provide a letter to utilities and other interested parties to help differentiate between these two activities. The definition of engineering is contained in the statutes. There is no statutory definition of a designer. To make matters more difficult, for instance, the well-known steel framing designer and a lighting designer are clearly different professions. It is not quite sufficient to say that the designers confine their activities to aesthetic decisions because this begins to approach architecture. The lighting designer should also do some mathematics that approaches engineering. Lighting designers, as such, are not licensed by any state and do not have professional liability insurance. It is expected that a lighting engineer will follow all the state and local laws as well as all building codes applicable to the project's design without any caveat to the contrary. There are people that use the term lighting

designer to describe themselves and their activities that are also licensed architects or engineers and these people are not the subject of this newsletter article.

Some Examples:

1. The lighting designer might say that the appearance of a light fixture compliments the architecture of the project and the lighting engineer will be responsible to determine whether or not this light fixture provides sufficient illumination to meet the applicable minimum code requirements for lighting.
2. The lighting manufacturer's representative may have convinced a project owner that a particular parking lot pole-mounted light has favorable long term economics and may provide a computer print out of expected light levels on the pavement. These computer-generated studies almost always contain caveats disclaiming any responsibility for the information provided on the sheet. A lighting engineer is then responsible to provide stamped engineering documents stating that the proposed light meets parking lot lighting requirements such as ANSI Standards, IES Standards, insurance requirements, and State and Municipal lighting ordinances.
3. Lighting engineers are almost the only professionals allowed to confirm that a project is in conformance with the lighting requirements contained in the Life Safety Code, the National Electrical Code, OSHA, ANSI Standards, BOCA, ICC codes, other NFPA standards and State and Municipal requirements that apply to building stairways, sidewalks, corridors, roadways, parking lots, airports, marine terminals, health care facilities, industrial areas, sports venues, and educational facilities. Lighting designers are often employed in projects involving merchandise lighting, advertising displays, performing arts, landscape lighting, residential lighting, high-end public spaces, and in conjunction with lighting engineers.

Any person can offer their services to the public as a lighting designer. The closer this person comes to engineering or architecture the higher the risk of being in violation of state statutes regulating these professions. Although the judicial system has resolved many suits involving bad lighting design vs. public welfare and the safeguarding of life, health or property these decisions don't go to the question about the difference between engineers and designers in this context. This question finds its way back at the state's professional regulating Boards and the Attorney General to resolve.

When the PE Board investigates a complaint of unlicensed practice in a case such as this, the Board will consider answers to the following questions. What were the expectations of the designer's client? Did the client believe that the designer was providing engineering services? Did the designer make it clear to the client that the services did not include proof of conformance to applicable building codes? Was the designer's presentation used as the basis for Planning Board approval or the basis for a building permit? What issues involving public safety are involved in the case? Is the designer's work in conformance with applicable building codes? On a case by case basis, the Board will decide whether the designer is in violation of the statute.

## Dr. Donald Grant, P.E. Joins the Board



The Maine Board of Licensure for Professional Engineers is pleased to welcome Dr. Donald Grant, P.E., to membership. Dr. Grant was appointed on August 4, 2005 by Governor Baldacci to fill the vacancy created by Dr. Wayne Hamilton's retirement. His term runs through October 23, 2008.

Just as was his predecessor, Dr. Grant is a valued member of the University of Maine faculty. The R.C. Hill Professor in the Department of Mechanical Engineering, he continues to serve as the department chair. Dr. Grant has been a faculty member at the University since 1956.

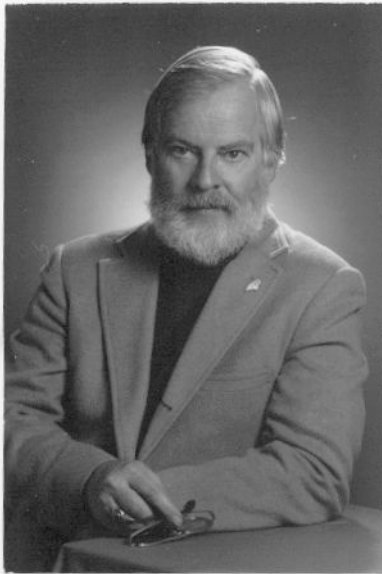
As Board Chairman Ralph Sweet wrote in his recommendation letter to the governor: "The appointment of Dr. Grant would bring to the Board of Professional Engineers an engineer with a background in mechanical engineering. This would further enhance the balance of the various engineering areas of expertise on the current Board".

Highly recommended by his peers at the University, Dr. Grant brings a wealth of experiences in both the engineering and the publishing fields. Throughout his career, he has received many honors for his achievements in engineering education. He holds membership in many professional, scholarly and honor societies, including: the American Society of Mechanical Engineers, American Society for Testing Methods, Tau Beta Pi, Pi Tau Sigma, Sigma Xi, and Phi Kappa Phi.

We look forward to working with Dr. Grant on the Board and wish him a rewarding tenure in this service.

<b>EXAMINATION REPORT</b>			
<b>April 2005</b>			
<b>Exam Discipline</b>	<b>Number of Examinees</b>	<b>Number Passing</b>	<b>Percent Passed</b>
<b>Architectural</b>	<b>3</b>	<b>1</b>	<b>33.3</b>
<b>Civil</b>	<b>29</b>	<b>18</b>	<b>62.1</b>
<b>Electrical</b>	<b>6</b>	<b>1</b>	<b>16.7</b>
<b>Environmental</b>	<b>2</b>	<b>1</b>	<b>50.0</b>
<b>Mechanical</b>	<b>12</b>	<b>8</b>	<b>66.7</b>
<b>Structural 1</b>	<b>8</b>	<b>5</b>	<b>62.5</b>
<b>Structural 11</b>	<b>1</b>	<b>1</b>	<b>100</b>
<b>Fundamentals of Engineering</b>	<b>130</b>	<b>75</b>	<b>57.7</b>

## **William A. Lotz, P.E. Rejoins the Board**



At the September 2005 meeting, the Board of Licensure for Professional Engineers welcomed William A. Lotz, P.E., as a new member of the Board. Governor Baldacci appointed Mr. Lotz on September 22, 2005 to fill the vacancy created by the death of Charles J. Behounek. Mr. Lotz's term runs through April 21, 2006.

Mr. Lotz previously served on the Board from February 1986 to September of 1995. He was the Board chair for the last three years of his tenure.

A graduate of the University of Miami with a B.S. in Mechanical Engineering, Mr. Lotz was honored in 1989 as the Distinguished Alumnus of the Year. A specialist in consulting on moisture and insulation problems in buildings, Mr. Lotz has fifty years experience in building construction, materials technology and design. He has worked with clients throughout North America. A prolific author, he has published over 250 technical articles in a wide variety of professional publications, including the ASHRAE Journal, the Engineering News Record, and the Journal of Light Construction. Mr. Lotz has been a member of ASHRAE for 48 years and is an ASHRAE Life Member, Fellow, and Distinguished Lecturer.

Not only will Mr. Lotz bring nearly a decade of previous Board experience to the Board but also his extensive engineering knowledge and background. The Board welcomes his return.

### **Upcoming Board Meetings**

**January 19<sup>th</sup>, 2006**

**March 23<sup>rd</sup>, 2006**

**June 15<sup>th</sup>, 2006**

**If you would like to attend as an observer, please contact our office at least one Day prior, so we can be sure to have adequate seating.**

**Contact Warren Foster at (207)287-3236 or [warrenfoster@link2usa.com](mailto:warrenfoster@link2usa.com)**

# TOOLS OF OUR PROFESSION



Some of us currently practicing engineering today were at one time accomplished with the slide rule as a tool for calculation. Those who entered the profession a few years later started with handheld electronic calculators. We now have laptop computers available with more calculating power than some of the mainframe computers available to the slide rule generation. The power of these new tools is enhanced by software for a wide array of typical engineering calculations/analyses. With these powerful new tools, we can now do analysis that took hours (even with simplifying assumptions) in a matter of seconds. These new powerful tools are, however, both an asset and a liability.

Those of us who entered the profession while the slide rule was the calculating tool developed a sense of the size of the answer (magnitude of the result) and were taught to consider significant figures. As electronic calculations became more powerful and became the tool of choice, the time required to do analysis was reduced, and the number of significant figures that could be carried by the calculation was increased. We began to lose the sense of the magnitude of the answer and how precise or imprecise the analysis is.

Today we have the added challenge of working with complex software which was developed by others. We are left to input parameters to the program and hit the enter key. In a few seconds, we have an answer, but is the answer correct, reasonable, or completely out of range. This is where the engineer's responsibility lies. It is imperative that we have a sufficient understanding of the software to use it for the proper application and to know the effect of the parameters selected. Do not forget that the engineers, not their tools, are ultimately responsible for public health and safety.

Stephen W. Cole, P.E.



# **MAINE ENGINEERING PROMOTION COUNCIL BANQUET AND EXPO**

**Mark your calendars for March 3rd and 4<sup>th</sup> of 2006!** The Annual Maine Engineering Promotion Council Banquet will be held in Orono the evening of Friday March 3<sup>rd</sup>. On Saturday the Maine Engineers' Week celebration and Expo will be held in the Field House of the University of Maine, Orono. You probably remember last year's Expo at USM where 800 students and their parents had a great time. Maine Engineers' Week was created to educate students about engineering career opportunities right here in Maine, and this effort is really gaining momentum.

The banquet is a wonderful way to network with colleagues in support of a good cause. The Expo is a wonderful opportunity for kids of all ages to find out more about careers in math, science and engineering by participating in fun hands-on activities, experiencing fascinating exhibits, and talking with real engineers and scientists about their careers. There were approximately 60 exhibit booths and activities at the 2005 Expo, and we're hoping to top that at the 2006 Expo! It's never too early to get kids fired up about their futures and to get them to make contact with people who can help them discover their options. Find out more about the event including how you can get involved at [www.EngineeringME.com](http://www.EngineeringME.com).

**We'll see you in March!**

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## **Reappointed and Ex Officio Board Members**

Governor Baldacci has reappointed three existing members of the Maine Board of Licensure for Professional Engineers. The three reappointed members are:

- Stephen W. Cole, P.E. was appointed on August 4<sup>th</sup>, 2005 to his second term which will end October 10, 2009.
- Paula M. Hamilton, Public Member was appointed on August 22<sup>nd</sup>, 2005 to her second term which will end March 17, 2010.
- Kathy Gustin Williams, P.E. was appointed on August 4<sup>th</sup>, 2005 to her second term which will end June 20<sup>th</sup>, 2010.

In addition to the reappointments, recent legislation has made the Chief Engineer of the Maine Department of Transportation (M.D.O.T.) as an Ex Officio voting member of the Board. John E. Dority, P.E. is the present Chief Engineer of M.D.O.T.

## ***...in Memory***

### **Charles J. Behounek, P.E. 1941-2005**

The engineering community is saddened by the loss of Charles J. Behounek, P.E., a member of the Maine Board of Licensure for Professional Engineers who passed away on May 28, 2005.

Chuck served on the Board for nine years, from April 1996 until his death. During his tenure on the Board, Chuck served on the Executive Committee and the Rules Committee. His work on the Rules Committee included developing the Board's strategic plan. He represented the Board at the National Council of Examiners for Engineering and Surveying (NCEES) by serving on both the Committee of Finance and the Committee of Examination Policy and Procedure. As a Board member, Chuck especially contributed to meetings because he was able to look at both sides of an issue. This ability helped to generate meaningful discussions of all issues.

After attending schools in New York and serving in the U.S. Navy, Chuck graduated from New Mexico State University. Combining engineering and naval careers, Chuck retired as a Commander in 1992 and as a civil engineer in 2003. He worked as a civil engineer for the Portland Pipeline until 1998 when he continued his engineering career for five more years while working for the U.S. government.

Chuck had a wide variety of interests but his greatest passion was flying. He was a flight instructor. An Eagle Scout, Chuck served as a Boy Scout leader in Texas, New York, and Maine.

Chuck's surviving family includes his wife Sheila and children Joseph, Robert, Taylor, Louisa, Mary Fran, and Edith as well as four grandchildren.

The Board is grateful for his years of service to Maine's professional engineers and will greatly miss his conscientious commitment to our organization.



# Renewal Notices coming to a Mailbox near you

Renewal Notices will be in the mail in November. You can reply by the traditional Envelope and Stamp method, but maybe you should check out on-line renewals. During the last renewal cycle in 2003, 25% of Licensees renewed on-line, and we're expecting a greater adoption rate in 2005.

## On-line Renewal

- It's fast and easy
- No Envelopes, No stamps
- Open 24 hours a day and weekends and Holidays
- Convenient Credit Card Payment
- Verification that Renewal is Complete and has been received.

## What do I need?

- Name and PE Number
- Credit Card
- Mandatory Continuing Professional Development Hours (PDH'S)
- Go to [www.maine.gov/professionalengineers/](http://www.maine.gov/professionalengineers/)

## Who can't renew on-line?

- Licensees changing to Retired Status
- Those applying for Exemptions to Continuing Professional Education requirements
  - Armed Forces
  - License Issued for Less than 2 years
  - Extenuating Situation, Hardship, or Disability

Renewals are required to be postmarked or on-line Date stamped by December 31, 2005. Any submitted for the next 90 days will be subject to a \$10 late fee in addition to the renewal fee.

## Renewals after 90 Days (Inactive)

According to the Statute Chapter 32 Section 1357 Expiration and Renewals, "Any person who submits an application for renewal more than 90 days after the renewal date is subject to **all the requirements governing new applicants** under this chapter, except that the board may in its discretion, giving due consideration to the protection of the public, waive examination if the renewal application is made within 3 years from the date of the expiration."

In addition, to reinstate an inactive license, a licensee must obtain all delinquent Professional Development Hours up to a Maximum of 30 PDH.

